1-1-1980

Self-concept and peer relationships of mentally retarded and learning disabled children

Susan M. Feider

X-52

THE SELF-CONCEPT AND PEER RELATIONSHIPS OF MENTALLY RETARDED AND LEARNING DISABLED CHILDREN

by

Susan M. Feider

A RESEARCH PAPER
SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN EDUCATION
(SPECIAL EDUCATION)
AT THE CARDINAL STRITCH COLLEGE

Milwaukee, Wisconsin

1980

This research paper has been
approved for the Graduate Committee
of the Cardinal Stritch College by

Sister Joanne Marie Kuebler
(Advisor)

Date May 4, 1980

ACKNOWLEDGMENTS

I would like to dedicate this work to my advisor, Sr. Joanne Marie Kliebhan, for her guidance, and to my special friend, Greg, for the hope and support he gave me throughout the past months as I prepared this paper. I would also like to give special thanks to my family and friends who also encouraged me to reach my goal.

TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

Introduction

Since the passage of P. L. 94-142, the Education for all Handicapped Children Act, in 1975, the concept of "least restrictive environment" has assumed an important role in the education of exceptional children. Educators are currently concerned with placing exceptional children in the mainstream of regular education as much as possible while also providing for the special needs of the children. Most exceptional children who have been separated from regular education children for many years are now spending a portion of their academic and/or non-academic instruction time in regular education classrooms.

Purpose

The purpose of this study was twofold: (1) to explore recent research concerning the self-concept of mentally retarded children and learning disabled children and (2) to review research concerning the types of relationships these exceptional children are able to build with their regular education peers. This study was geared to investigate the following questions: How does the mentally retarded child and the learning disabled child evaluate himself in relation to children in regular

education classrooms? Can the exceptional child's self-concept be effectively changed? How well are mentally retarded children and learning disabled children accepted by their regular education peers? What are some possible methods or techniques of aiding the exceptional child improve his self-concept and build appropriate peer relationships with regular education children?

Scope and Limitations

This study has reported recent research which has been conducted in the United States during the past three years involving elementary school-age mentally retarded children and learning disabled children.

Definition of Terms

Several terms need to be understood before reviewing this study.

Mentally retarded children and learning disabled children--The American Association on Mental Deficiency (cited in Kirk, 1972) referred to mental retardation as

> . . . subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior. Subaverage intellectual function in this definition refers to one standard deviation below the general population mean on a standard intelligence test. Impairment in adaptive behavior refers to deficiencies in (1) maturation, (2) learning, and (3) social adjustment. (p. 163)

The National Advisory Committee on Handicapped Children in the United States Office of Education (cited in Kirk, 1972) proposed that

> Children with special (specific) learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or in spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include conditions which may have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental disadvantage. (pp. 43-44)

Throughout this study, these mentally retarded or learning disabled children have been referred to as MR or LD children, respectively, or as exceptional children, children with EEN, or EEN children.

Regular education children--Children whose educational needs can be met in regular education and do not need any type of special educational services.

Least restrictive environment--Educational setting for the exceptional child which is as nearly as possible like regular education but is also meeting his exceptional education needs.

Mainstreaming--A method of fulfilling an exceptional child's need to be placed in the least restrictive environment as a part of his education plan. The exceptional child is enrolled in a special education class but participates with the regular education class for specific subjects or activities that will meet his special needs.

Self-concept--The sum total of all the characteristics given to oneself along with their positive and negative values. Self-concept is based on the beliefs and attitudes one has learned about himself through his experiences (Houghton, 1978).

Peer Relationships--How well one is able to relate to others his age or at his level. Some examples of this among children are cooperatively working and playing together, being accepted into a previously established group and demonstrating appropriate social behaviors.

Summary

This chapter has briefly reviewed the recent changes in educational programming for exceptional children. The purpose of this study was stated and several research questions were posed. Research completed within the past three years relating to the self-concept and peer relationships of elementary school-age mentally retarded children and learning disabled children has been the focus of this study. Several pertinent terms were defined.

CHAPTER II

REVIEW OF RESEARCH

Introduction

The research reported in this chapter has been divided into three major areas: (1) those investigating the exceptional child's self-concept; (2) those investigating the exceptional child's self-concept and peer relationships with regular education children; and (3) those investigating only the exceptional child's peer relationships.

Studies of Self-Concept

Studies Comparing EEN Children to Children in Regular Education Classrooms

In 1977, Calhoun and Elliot completed a three-year study in which fifty EEN children in special education classrooms were compared with fifty EEN children in regular education classrooms. All of the children were individually assessed in September and June with the Stanford Achievement Test and the Piers-Harris Children's Self-Concept Scale.

The Piers-Harris Children's Self-Concept Scale consists of eighty declarative statements, half of which are stated positively and half of which are stated negatively. The child responds positively or negatively to each

statement, describing how he feels about it. A Composite Self-Concept Index is obtained from this scale as well as six cluster scores in the areas of Behavior, Intellectual and School Status, Physical Appearance and Attributes, Anxiety, Popularity, and Happiness and Satisfaction.

The EEN children who had remained in the regular education classrooms had significantly higher self-concept scores than those children who had been placed in special education classes.

Kendall (1977) studied ninety boys ranging in age from eight years six months to twelve years from five inner-city elementary schools. They were divided into three groups (a) thirty segregated educable mentally retarded (EMR) boys who were enrolled full-time in special education classrooms, (b) thirty EMR boys who were enrolled in regular fourth grade classrooms and receiving no additional help with their disabilities, and (c) thirty EMR boys who were integrated in regular fourth grade classrooms and receiving additional support provided through Learning Resource Centers. All of the boys had been assigned to these settings for at least three years.

The Wechsler Intelligence Scale for Children-Revised (WISC-R) was administered for intellectual assessment and the Iowa Tests of Basic Skills was used to measure reading achievement. The Illinois Test of Self-Derrogation was

used to measure self-concept and administered to groups of five to seven children. This test consists of thirty easy-to-read items. The child chooses one of two responses, one which is socially acceptable or one which is neutral or socially undesirable, indicating the one he feels is most like him. A low score on this test suggests a positive self-concept. The reading achievement and self-concept testing was begun and completed during the Spring of the academic year.

A significant difference was found between the reading achievement scores of the segregated EMR boys and the EMR boys who were enrolled in regular fourth grade classrooms without additional support. No significant difference was found between the reading achievement scores of the segregated EMR boys and those who were integrated in regular fourth grade classrooms with additional support or the latter and the EMR boys who were enrolled in regular education classrooms. All of these differences were found at the .05 level.

Significant differences were found at the .05 level between the self-concept scores of the segregated EMR boys and the boys who were enrolled in regular fourth grade classrooms and between the latter and the EMR boys who were integrated in regular fourth grade classrooms and receiving additional support help. No significant difference at the .05 level was found between the self-concept scores of the segregated EMR boys and those who were integrated in regular

fourth grade classrooms and receiving support help. In a comparison of the mean self-concept scores of each group, the EMR boys who remained in the regular fourth grade classrooms obtained an average score of 4.16, the EMR boys who were integrated into the regular fourth grade classrooms and received additional support help obtained an average score of 7.16, while the EMR boys who were segregated in a special education classroom obtained an average score of 7.76. A positive self-concept is indicated by a low score on the Illinois Test of Self-Derrogation. The results of this study demonstrate that the self-concept of these EMR children in segregated classrooms was significantly lower than the self-concept of those EMR children who were enrolled in regular fourth grade classrooms.

In a contrary study, Smith, Dolecki and Davis (1977) found the mean composite self-concept score (M = 51.94, S.D. = 12.25) of the LD children they studied to be higher than that of the norm group (M = 51.84, S.D. = 13.87) as listed in the Piers-Harris Children's Self-Concept Scale Examiner's Manual. These 206 LD children from twenty-three self-contained classrooms had been enrolled in the special classrooms for an average of twelve months. They ranged in age from six years two months to ten years ten months (M = 9 years 6 months). The mean Full Scale score of the group on the WISC-R was 86.96.

Although the researchers expected the LD children to have lower self-concepts than regular education children,

they realized several factors which may have contributed to the outcome of the study. Consistent with the theory of social comparison processes and reference group theory, the LD children developed their self-concepts based on their experiences with the significant others around them. Since they were segregated in special education classrooms and had no contact with regular education children, the children perceived one another as being similar to themselves and based their social comparisons on their special education classmates. Because of the smaller class size of the special education classrooms and success-oriented academic activities, the LD children may have received more attention and felt more a part of the group, thus positively affecting their self-concepts.

Ribner (1978) used a twenty-nine-item self-concept questionnaire to evaluate the feelings of 468 minimally brain damaged boys in New York City. The boys ranged in age from eight to sixteen years. Three hundred eighty-six of the boys had been enrolled in special education classrooms for at least one year while 82 of the boys had more recently been referred for evaluation and later recommended for placement in special education classrooms.

The statements of the questionnaire were divided into three areas: interpersonal relations, school adequacy, and general competence. Each item was read twice to small groups of the boys. Each of them responded by checking

yes or no, depending on how well the statements expressed the way he usually felt.

Ribner found that the boys who had been enrolled in the special education classrooms for at least a year had a higher self-concept on the school adequacy and general competence areas of the questionnaire than the boys who had subsequently been recommended for placement in special education classrooms (.001 level). The findings were attributed to Ribner's opinion that the exceptional child's self-image of school adequacy is depressed by the continuous failures he experiences in the regular classroom, thus, a transfer to a special education classroom would enhance one's school-related self-image.

Calhoun conducted an exploratory small-sample study in 1978 involving thirty-four children in grades two through six (M = 9.94 years) and thirty-four special education children--fourteen educable mentally retarded children (M = 9.93 years), nine learning disabled children (M = 10.56 years) and eleven emotionally disturbed children (M = 9.45 years). All of the special education children were integrated for part of the day in regular education classrooms for academic instruction for three years. All of the children were individually administered the Coopersmith Self-Esteem Inventory and Pupil Behavior Inventory. No significant difference was found between the mean scores of the regular education children and special education children on either inventory.

Studies Indicating Positive Change of Self-Concept

Smith and Pfeiffer (1977) investigated cross-age helping as a method of increasing the self-concept of educable mentally retarded children. Of the primary unit consisting of fourteen children, three older children (ages eight and nine years) served as tutors and were paired with three younger children (ages five and six years). The remainder of the class served as the comparison group.

The major responsibilities of the tutors were to reinforce the prereading skills of the tutees for one-half hour each day, guide the tutees as they completed their seatwork, and help in acquainting the tutees with the school facilities, routines, rules, and playground and cafeteria procedures. Each tutor worked with his tutee for a period of one school year.

Statistical results were not available but an evaluation of the method was made based on subjective observation and individual judgments. The researchers found that for the tutors, the method of cross-age helping "provided feelings of competency and increased self-esteem, developed responsibility and maturity, and helped overcome shyness" (p. 34).

Strang, Smith and Rogers (1978) studied fifty children from eight classrooms in four schools who had each been enrolled in exceptional education classrooms for an average of twelve academic months. The children ranged in

age from six years two months to ten years ten months and the mean IQ of the total group was 86.96 using the WISC-R. At each school, the children of one of the EEN classrooms were integrated into regular education classrooms on a daily half-day basis for Reading and Math. The children of the other EEN classroom remained segregated for comparison data.

The WISC-R and Metropolitan Achievement Test were administered to each of the experimental and comparison group children during October and May. The Piers-Harris Children's Self-Concept Scale was administered to all of the children in small group sessions in the EEN classrooms during October, February or March (one month after the mainstreaming began) and in May.

The researchers found that the means of the experimental group on the Piers-Harris Children's Self-Concept Scale were significantly higher than those of the comparison group at the time of the third testing at the .025 level. The scores of the experimental group significantly increased on the cluster areas of Intellectual and School Status (.02 level), Physical Appearance and Attributes (.01 level), Popularity (.05 level), and Happiness and Satisfaction (.025 level). The researchers concluded that the children in the experimental group had selectively utilized both of the reference groups which were available to them.

They selected their regular classroom peers for self-concept-relevant comparisons and their handicapped classroom peers for academic-relevant social comparisons. Apparently, the experimental group children viewed their mainstreaming as a successful experience and felt more a part of the whole school.

In a similar study, Smith, Dokecki and Davis (1977) extended their study which was described previously by randomly selecting twenty-five LD children from the originally studied group and mainstreamed them for half days in regular education classrooms for Reading and Math instruction. Twenty-five children were also randomly chosen to form a comparison group. The Piers-Harris Children's Self-Concept Scale was administered to all of the children in both the experimental and comparison groups in the beginning of the year before any mainstreaming began, one month after the experimental group was mainstreamed (January or February), and at the end of the school year (May).

The third mean composite self-concept score of the experimental group of children was significantly higher than that of the comparison group children. A significant increase in the mean composite self-concept scores of the experimental group was found when comparing the beginning of the year and end of the year scores. Significant increases were also found between the beginning of the year and end of the year cluster scores in the areas of Intellectual and School Status, Physical Appearance and

Attributes, Popularity, and Happiness and Satisfaction. As similarly concluded by the reseachers of the previously cited study, Smith, Dokecki, and Davis theorized that the children who were mainstreamed in the regular education classroom selectively utilized both of the reference groups with which they had contact. They chose the group of children more similar to themselves, the academically handicapped children in their special education classroom, when making academic-relevant social comparisons. When making other self-concept relevant comparisons, they chose their regular classroom reference group.

Studies Indicating Negative Change of Self-Concept

Smith, Dokecki and Davis (1977) further extended the previously described study by randomly choosing twenty LD children from those who had been mainstreamed half-days in regular education classrooms during the second phase of the study. They were divided into experimental and comparison groups. All of the children were administered the Piers-Harris Children's Self-Concept Scale in February. An experimental manipulation was introduced to those children of the experimental group. The children in the experimental group were presupposed to only use the children in the regular education classroom as the reference group by which they would make their social comparisons. They were reminded several times in the directions for the test of their membership in the regular education classroom and of their regular education classroom teacher's name as well as the names of some of their regular education classroom

classmates. The comparison group children were not told of any particular classroom group to use for their social comparisons. In addition, the experimental group children were taken from their regular education classrooms for testing, while the comparison group children were taken from their special education classrooms.

The composite scores of the comparison group children increased an average of 7.30 points which was a significant increase. The composite scores of the experimental group children decreased by an average of 2.50 points. Although this was not a significant change, the researchers concluded that the restriction of using only the regular education class as a reference group caused the experimental group children's composite scores to decrease. The gain in the composite scores of the comparison group children was attributed to the fact that they were free to selectively utilize both the LD and regular education classroom comparison groups.

Strang, Smith and Rogers (1978) also extended their previously cited study by randomly choosing twenty of the academically handicapped children who had previously been mainstreamed into regular education classrooms on a half-day basis for Reading and Math instruction. The children ranged from eight years three months to eleven years zero months and had a mean WISC-R Full Scale score of 92.06. The Piers-Harris Children's Self-Concept Scale was individually administered to all of the children at the beginning of the

school year. All of them were again mainstreamed half-days into regular education classrooms for Reading and Math instruction. They were divided into experimental and comparison groups and were tested in January with the Piers-Harris Children's Self-Concept Scale.

The experimental group children were taken from their regular education classrooms for the testing and were directed to use the children in the regular education classroom as their reference group. The comparison group children were taken from their special education classrooms for the testing and were given no specific directions as to which classroom to use as their reference group.

The composite self-concept scores of both groups changed significantly (.03 level). The experimental group mean composite score decreased by 2.50 points while the comparison group mean composite score increased by 7.30 points. As was found by Smith, Dokecki, and Davis (1977), these researchers also concluded that the restriction of only utilizing the children in the regular education classroom as a reference group caused the mean self-concept scores of the experimental group children to decrease while the comparison group children were not restricted to a specific reference group and demonstrated an increase in their mean self-concept scores.

Studies Indicating No Change of Self-Concept

Mauser and Reynolds (1977) studied twelve children between four- and twelve-years-old who exhibited various perceptual-motor deficits and accompanying difficulties with social interactions. All of the children participated in an eight-week developmental activity program. The Martinek-Zaichkowsky Self-Concept Scale and the Body Coordination Test were administered to the children prior to and immediately following the program.

No significant difference was found between the pre- and post-test self-concept scores at the .01 level. A significant difference was found at the .01 level between the pre- and post-test scores of the children on the Body Coordination Test. These results suggest an improvement in body coordination but that increases in motor performance do not necessarily indicate an improvement of self-concept. Factors other than a child's perception of his motor ability are likely to form his self-concept.

Gabel, Graybill and Connors (1977) studied 63 LD children (M = 9.6 years old) from fifteen special education classrooms in a large metropolitan school system to determine whether informal parent-teacher communication was related to changes in academic achievement and self-concept among LD children. All of the children were administered the WISC-R and the Piers-Harris Children's Self-Concept

Scale individually and the Metropolitan Achievement Test (MAT) in groups in October and May. During a twelve-week period between February and May, the teachers tallied the types of communication they had with parents which included the number of personal, telephone and written contacts they had with the parent initiated by the parent or by the teacher.

A significant difference was not found between the pre- and post-test self-concept or MAT subtest scores indicating that the parent-teacher contacts did not affect the areas of self-concept or academic achievement among these LD children. These results may caution one from assuming that children will routinely benefit from increased parent-teacher communication.

Studies of Self-Concept and Peer Relationships With Regular Education Children

Sheare (1978) studied third, fourth, and fifth grade children from eighteen classrooms in central Pennsylvania. Forty-one of the children were learning disabled and enrolled in a resource program in which they worked in LD resource classrooms for forty-five minute periods three to five times weekly. They were assigned to regular education classrooms for the remainder of their in-school time. Forty-one regular education children were matched for age and sex from the regular education classrooms to which the LD children were assigned. The Piers-Harris

Children's Self-Concept Scale and the Peer Acceptance Rating Scale were administered twice to each intact classroom. The first testing was completed in November rather than September so that the children could become better acquainted and build patterns of acceptance and interactions. The second testing was completed in May.

The Peer Acceptance Rating Scale is a means of measuring the social status or popularity of children through the use of a forced-choice scale. Every group member rates every other group member by circling the appropriate number on a line next to the name of each person in the group.

A difference significant at the .01 level was found between the composite self-concept scores of the LD children and the regular education children at the time of the second testing, with the LD group obtaining the lower score. There were no significant sex differences nor a significant change in the composite self-concept scores of either group from the first to second testing. The peer acceptance scores at the end of the year indicated a significant difference in the level of peer acceptance between the LD children and regular education children, with the LD children receiving the lower ratings (.01 level). For both groups, the post-peer acceptance ratings were significantly higher than the pre-ratings (.01 level); however, the

regular education children made a greater gain than the LD children. These results demonstrate that these LD children had lower self-concepts and lower peer acceptance ratings than the regular education children although they did receive higher ratings in May than they did in November.

Bruininks (1978b) studied a total of 162 elementary school-age children from two suburban school districts in Minnesota. Twenty-three of the children were learning disabled but received most of their instruction in regular education classrooms with supplemental instruction from a special education teacher. Twenty-three regular education children were randomly chosen from the total group of 139 regular education children to serve as a comparison group.

The levels of achievement of all of the children were measured by the Key Math Diagnostic Arithmetic Test, the word identification subtest of the Woodcock Reading Mastery Tests, and the general information subtest of the Peabody Individual Achievement Test. The LD children were found to be significantly lower in performance than the comparison children on all of these achievement measures (.05 level).

The Peer Acceptance Rating Scale was used to measure the social status of the children. All of the children rated each other using this scale. Each child's perceived social status was also determined using the same scale by the children indicating how they felt each of their classmates regarded them. The Coopersmith Self-Esteem Inventory was

individually administered to all of the children to measure self-concept along with the Fundamental Interpersonal Relations Orientation-Behavior Scale. This measure of needs has six scales: inclusion expressed, inclusion wanted, affection expressed, affection wanted, control expressed, and control wanted. All of the testing was done during the Spring of the year.

The results of the testing indicated that the LD children had significantly lower social status and self-concept scores than the comparison children (.05 level). The LD children rated themselves significantly higher in status than they were rated by their regular education classmates (.05 level). No significant difference was found between the perceived and actual status ratings of the comparison group regular education children. The learning disabled children also demonstrated the same interpersonal needs for inclusion, affection, and wanted control as the comparison group children but had a higher need to express control. Bruininks theorized that the LD children chose friends on the same basis as the regular education children. These LD children had lower self-concepts and peer ratings than the regular education children and perceived their social status to be higher than it actually was.

Studies of Peer Relationships

Studies Demonstrating Improvement of Social Status of EEN Children

Ballard, Gottlieb, Corman and Kaufman (1977) conducted a two-phase study involving third, fourth and fifth grade children in two school districts in Texas. Thirty-seven EMR children were mainstreamed into regular education classrooms, one EEN child per classroom. These children were an average of eight to ten months older than the regular education children in their classrooms. Twenty-five of the classrooms were designated as experimental and twelve were used as comparison classrooms.

All of the children in the comparison classrooms did the routine classroom work for the entire eleven-week treatment period which extended from February through April. As the first phase of the treatment, the children in each of the experimental classrooms were divided into four to six groups. One of the groups had as one of its members the EMR child who had been mainstreamed into that classroom. The group worked together forty minutes per day for five weeks to plan, produce, and present a multimedia project, such as a skit or slide show, on a topic from Social Studies, Science, or Language Arts. In order to give some structure to the treatment activities, each group was given a multi-media kit which provided instructions for using seventeen different media techniques. After these projects were

completed, a three-week interval passed in which no structured interaction between the EMR children and regular education children was provided. As the second phase of the study, all of the children were reorganized into different groups and spent three weeks doing a similar project, making the treatment period a total of eleven weeks.

Six weeks prior to the beginning of the first phase of the study, a forced-choice sociometric instrument was administered to all of the children. Two weeks after the completion of the second phase, the same instrument was again administered to all of the children. Each child's responses to this instrument indicated whether he liked, disliked, was neutral toward, or did not know each of his classmates.

The results of this study indicated that following the eleven-week treatment period, the acceptance of EMR children in the experimental regular education classrooms was significantly higher than that of the EMR children in the comparison regular education classrooms. Acceptance of the experimental group EMR children by their Phase 2 group members was significantly higher following the treatment than the acceptance of the comparison group EMR children by their classmates. The experimental group EMR children also received significantly higher acceptance ratings from their regular education classmates who did not work with them in either Phase 1 or Phase 2 of the treatment

than those the comparison group EMR children received from their regular education classmates. All of these results were considered significant at the statistical .05 level.

The results of this study demonstrated that the social acceptance of EMR children can be improved within the daily schedule of a regular education classroom. This significant improvement may have occurred because the regular education children, including those who did not directly participate with the EMR children, observed that these children were able to perform the same tasks as they did. The regular education children may have noted in the past that exceptional children were often assigned work and materials below the ability levels of the other children in the classroom. The authors also theorized that the improvement may have been the result of the cooperative nature of the activity groups, the use of a minimally academic task, the high degree of structure, and the length of the treatment period.

The games analysis approach was used by Marlowe (1979) to improve the social status of a ten-year-old EMR boy, C.F. His WISC-R Full Scale IQ was 64. He was physically smaller than his peers and was constantly rejected by them because of his immature behavior. The average age of thirteen of his regular education classmates who were chosen to participate in the study was 10.5 years.

The games analysis approach is a means of constructively manipulating the components and/or categories of a game to prevent the structure of it from automatically excluding children who have poor motor skills. The six categories of this approach include players, equipment, movement pattern, organizational pattern, limitations, and purpose.

Marlowe (1979) administered a sociometric questionnaire to all of the children in which they answered the question "How much do you like to play with _____ at school?" about each of his classmates. The children responded by circling one of a five-point scale of faces. C. F. received an average rating of 1.94 placing him as the least accepted male of sixteen in his classroom. The researcher used only the ratings of the boys in the classroom because typical ten-year-old children would give low ratings to an opposite-sex peer.

Two weeks after this sociometric questionnaire was administered, C. F. and thirteen of his regular education classmates were taken outside to play together. The first week they played regulation softball. They played various games that were modified by the games analysis approach during the second and third weeks. Traditional games were played again during the fourth week. The games played during the fifth week were again modified by the games analysis approach. The children played together for approximately

forty-five to sixty minutes per day during the five-week treatment period.

The same sociometric instrument which was used before the treatment period was used again three weeks after the treatment ended. C. F. made a positive gain of .37, raising his rating of 1.94 to 2.31. His former median rank of sixteen among the boys in his regular education class was raised to a rank of fourteen after the treatment period. An observer throughout the treatment period noted that C. F. displayed more prosocial behaviors during the weeks that the games had been modified by the games analysis approach.

Cronk (1979) used a procedure of "reverse mainstreaming" to change children's attitudes toward trainable mentally retarded (TMR) children. A total of sixty-seven regular education children were assigned to the experimental group--first grade - 19, third grade - 23, sixth grade - 25. Sixty regular education children were assigned to the comparison group--first grade - 20, third grade - 17, sixth grade - 23. The Children's Attitude Survey was individually administered to each of these children. The children responded "yes" or "no" to statements which were divided into five areas: (1) Personal Contact with TMR's; (2) TMR's Appearance and Behavior; (3) TMR's Feelings and Expression of Feelings; (4) Acceptance as a Family Member; and (5) Schooling for TMR's. As a part of the pre-testing, each of the children also drew a picture of someone doing something with a TMR.

The experimental group children went to the TMR classroom for a period of two weeks and worked alongside or with the TMR children. Some of the activities they helped each other with included table games, group games, art, handicrafts, outdoor games, indoor games, and toys. The comparison group children did not have any programmed contact with the TMR children. After the completion of the treatment period, the Children's Attitude Survey was again administered to all of the children. Each of them also drew a picture of himself doing something with a TMR.

A significant difference was found at the .05 level between the post-test scores of the experimental and comparison groups at both the first and third grade levels. Significant changes were found between the pre- and post-test scores of the experimental group children in the first grade (.05 level), the third grade (.07 level), and the sixth grade (.10 level). The drawings by the experimental group children which were included with the post-testing generally portrayed the TMR children as equal or smaller in size than the regular education children doing more realistic activities and working one-to-one with someone. The drawings done by the children before the experimental treatment generally portrayed the TMR children as larger than average, aggressive, and doing things children cannot do, such as flying airplanes. The results demonstrated that the attitudes of these regular education children changed positively toward the TMR children as a result of their interaction.

Studies Demonstrating Lower Social Status of EEN Children

Bruininks (1978a) studied sixteen LD children (twelve boys and four girls) in the first through fifth grades from four school districts in Minnesota. These children were mainstreamed in sixteen regular education classrooms but spent forty-five minutes per day in LD resource rooms. Sixteen children were chosen, one from each room where an LD child was mainstreamed, as a comparison group from the total group of 394 regular education peers. The Peer Acceptance Rating Scale was administered in the Spring to all of the regular education children on which they rated all of the other children in their classroom. The LD children and the comparison group children were also tested using the same scale although they indicated how they perceived each of their classmates regarded them.

The LD children received significantly lower peer status scores than the comparison group children (.01 level) and the total class group (.02 level). Significantly lower peer status scores were received by the LD boys when compared to the comparison group boys (.01 level) and the total class group (.005 level). The LD boys and the total LD group rated themselves significantly higher in peer status than the actual status that they received from their regular education peers (.05 level). A significant difference was not found between the perceived and actual status scores of the comparison group children (.05 level). The researcher

stated that there were too few girls in the sample to allow for meaningful comparisons.

These LD children were found to be less socially accepted than their peers in the regular education classrooms. The LD children were also found to be less accurate than their peers in perceiving their social status among the regular education children.

In 1978, Reese-Dukes and Stokes studied fifteen fifth and sixth grade regular education classrooms in which thirty-two EMR children had been completely mainstreamed. Thirty-two non-EMR children were chosen as a comparison group from the same classrooms. A sociometric scale "How I Feel About Others" which was developed by M. E. Bonney in the early 1950's was administered to all of the classrooms in which EMR children were mainstreamed. This scale measures an individual's reputation within a group and how he is regarded by others in relation to five criteria of friendship.

The total group of regular education children received a significantly higher mean sociometric score than the total group of EMR children (.005 level). At the .01 level, the non-EMR males and females obtained significantly higher mean scores than the respective EMR groups. The regular education boys rated the EMR girls significantly lower than the non-EMR girls (.05 level) while the regular education girls rated the EMR boys significantly lower than the non-EMR boys (.025 level). In all areas of comparison in this

study the EMR children received significantly lower sociometric scores than the comparison group of regular education children.

Young, Algozzine and Schmid (1979) studied 96 fourth grade children in a suburban elementary school in which there were no handicapped children. The children were randomly assigned to one of eight groups who would view videotapes of a regular education fourth grade boy. Before each group viewed their videotape, they were told the child was educable mentally retarded, learning disabled, emotionally disturbed or from a regular education class and would be coming to their class soon. Thus, each label was assigned to two groups, totalling eight groups. After viewing their videotape in which the boy was undergoing achievement and perceptual-motor testing, each child completed a questionnaire about how he felt the child would be accepted by his peers. Before viewing the second part of the tape in which the child would engage in nontask-oriented free play, additional attributes of the already "labelled" child on the videotape were described to each group. The child to be viewed was assigned either positive attributes, such as was good in sports, could tell funny stories and could make others laugh, or neutral attributes, such as similar to others, sometimes finished his work and did what the teacher said but sometimes did not. After viewing this second portion of the videotape, each child responded to a second set of questions regarding the peer acceptability of the

child he had just viewed. The children marked facial diagrams indicating degrees of positive or negative feelings in response to the questions of both of the questionnaires.

A significant difference was not found between the fourth grade children's peer acceptance ratings before they received any attribute information and after receiving the "positive" information (.05 level). The children who received "neutral" attribute information assigned significantly lower peer acceptance ratings after receiving that information. This study demonstrated that the labels did not cause a difference in the ratings of the regular education children but the additional knowledge of the attributes did appear to make a difference in the ratings. Based on these findings, it would be beneficial to emphasize the positive attributes of an EEN child who is to be mainstreamed into a regular education classroom.

In 1977, Siperstein and Gottlieb conducted a study of seventy-two fourth and fifth grade regular education children in a school in which no children were diagnosed as mentally retarded. All of the children viewed various audiotapes of a spelling bee between Billy and John. Billy, normal-appearing and academically competent, remained the same in all of the audiotapes to serve as a comparison for John. The portrayal of John varied among the audiotapes as

he appeared as a Down's Syndrome child and a normal-appearing child. Eighteen of the regular education children viewed John as a normal-appearing, competent speller; eighteen others viewed him as an abnormal-appearing, competent speller; eighteen others viewed him as a normal-appearing, incompetent speller; and eighteen others viewed him as an abnormal-appearing, incompetent speller. Group interaction as they viewed the audiotapes was kept to a minimum. All of the regular education children completed three questionnaires after viewing their audiotape. The first contained general information questions; the second was a positive and negative adjective checklist; and the third was a measure of social distance which reflected the degree to which each of the children would have liked to be close to John. A teacher-rating of each child's social status was also obtained.

The results were examined using several types of analysis. At the .01 level of significance, 22% of the regular education children viewed themselves as better spellers than normal-appearing, competent John, while 55% of the same group thought themselves to be better spellers than mentally-retarded-appearing, competent John. At the .02 level, the children responded more positively to John in the normal-appearing condition than the abnormal-appearing condition, regardless of his academic competence.

The regular education children regarded John to be in a higher grade when he was viewed as competent than when he was incompetent, regardless of his appearance (.001 level). In general, the children responded more favorably to competent John than to incompetent John (.001 level). The only significant finding using the social distance scale was found at the .05 level. Regardless of his physical appearance or level of competence, the females were less accepting of John than the males.

When using the social status ratings as assigned by their teachers, the high-status children were less accepting of normal-appearing, competent John than the low-status children (.01 level). At the .05 level, however, the high-status children were more accepting of normal-appearing, incompetent John than the low-status children.

These results indicated that the regular education children rated the normal-appearing, competent target child more positively than the target child who appeared mentally retarded and was an incompetent speller. The boys were more accepting of John than the girls regardless of his level of of competence or appearance. The high-status regular education children were more accepting of the target child who was normal-appearing but an incompetent speller.

In a similar study, Siperstein, Bak, and Gottlieb (1977) prepared two audiotapes of a spelling bee. In one, the target child was a normal-appearing, competent speller. The target child in the other audiotape was a Down's Syndrome child who was an incompetent speller. Both of

these target children were paired with a child of the same sex who was a competent speller.

Eighty sixth grade children from three schools in an upper middle-class community were divided into twenty groups with four children of the same sex in each. Ten of the groups contained children who were friends while the children in the other ten groups were not friends. Half of the groups were randomly assigned to view an audiotape in which the target was normal in appearance and academically competent. The other groups viewed an audiotape in which the target child was abnormal in appearance and was academically incompetent. An adjective checklist was administered three times to measure the regular education children's feelings toward the target child. The checklist contained an equal number of positive and negative descriptors in the areas of academic competence, appearance, social behavior, and affective feelings. It was individually administered immediately after the children viewed the videotape. It was administered a second time as a group in which the four children were required to reach a consensus, thus, forcing a group discussion. It was again individually administered following the group discussion.

At the .01 level of significance, the regular education children responded more positively to the normal-appearing, competent target child and more negatively to the abnormal-appearing, incompetent target child. The responses of the children who viewed the normal-appearing

competent target child remained positive from the pre- to the post-discussion assessment while the responses of those who viewed the abnormal-appearing, incompetent target child became significantly more negative after the discussion (.05 level). These results indicate that the regular education children responded negatively toward the Down's Syndrome child who was an incompetent speller and became more negative toward him after discussing the audiotape with their friends.

Summary

This chapter has reviewed the recent research of the self-concept and peer relationships of mentally retarded children and learning disabled children. Several studies of self-concept found that EEN children who remain in regular education classrooms have higher self-concept scores than those who are segregated from regular education children but other studies demonstrated contrary results. Other studies showed that the self-concepts of EEN children could be raised through cross-age helping or integrating them into regular education classrooms on a part-time basis. When some of these same studies, however, were extended, and the EEN children were restricted to using their regular education peers as their reference group in making social comparisons, the self-concept scores of these EEN children were again lowered. Two unrelated studies found that a developmental activity program and informal parent-teacher

communication did not cause a change in the self-concept scores of EEN children.

In two similar studies of LD children, who received most of their instruction in regular education classrooms, it was found that these children had lower self-concept scores and peer acceptance ratings than the regular education children. In addition, one of the studies also demonstrated that the LD children rated themselves higher in social status than they were actually rated by their regular education peers.

Several studies indicated that the peer relationships of EEN children with regular education children could be enhanced through the use of structured interaction of the two groups and the games analysis approach. Two studies demonstrated that the EEN children received lower peer status scores than the regular education comparison groups. In several studies in which regular education children viewed videotapes of abnormal-appearing children and normal-appearing children at various levels of competency, the abnormal-appearing children were more negatively rated in peer acceptability than the normal-appearing children.

CHAPTER III

METHODS OF ENHANCING SELF-CONCEPTS

Introduction

The research and ideas reported in this chapter describe some methods of improving the exceptional child's self-concept and building more appropriate peer relationships with regular education children.

Self-Concept

Florio-Forslund (1977) stated that the teacher is the primary individual in the school environment responsible for enhancing the exceptional child's self-concept of himself as a person and as a student. Without a healthy self-concept, the exceptional child may "exhibit a lower evaluation of self and a negative attitude toward school" (p. 12). By utilizing positive communication strategies, the teacher can aid in the child's development of self-concept and attitudes.

Moller (1978) found that exceptional children (mentally retarded children in particular) often have confused self-concepts caused by the conflicting feelings they may have toward their handicap. The retarded child may feel

that he has been labelled as "inferior" because he may have overheard the term "mentally retarded" during the processes of diagnosis and placement or his peers may have directly confronted him with the term. Without a sympathetic explanation of his problem, the exceptional child may develop a poor self-concept, fear of unfamiliar situations, a low tolerance for frustration, and emotional immaturity.

Moller (1978) has recommended the following strategies to aid in the adjustment and overall development of the mentally retarded child in the regular education classrooms:

(1) Let the child know that you like him.

(2) Stress the similarities between the retarded child and your other students.

(3) Encourage him to make his unique contribution to your class.

(4) Retarded children learn much of their behavior through imitation. It is important that they be exposed to positive behavior models that will help them develop appropriate social behavior.

(5) Help him set realistic goals.

(6) If he displays very immature or inappropriate behavior in the classroom, talk with him privately. Explain exactly what is undesirable in his behavior and specify how he is expected to act.

(7) Note any changes or unusual developments in his behavior.

(8) Try to establish a regular channel of communication with his special instructors.

(9) Reward effort as well as achievement.

(10) Think about how you will answer him when he tries to confront his problem. (p. 60)

Moller (1978) also suggested a number of strategies the teacher may utilize to create an atmosphere in which the EEN child will be accepted by his peers and grow through his interaction with them. These strategies are to:

(1) Encourage an atmosphere of acceptance.

(2) Help the children organize group play that is inclusive.

(3) Rotate classroom responsibilities so that all children will have a turn.

(4) Discuss ways in which all children are similar.

(5) Initiate a special day for each child in class.

(6) Emphasize that there are individual expectations for every child in class.

(7) If your classroom has charts that record progress, prepare a separate scale to measure the work of your slower and mentally retarded students.

(8) Try marking the correct answers (on the mentally retarded child's work) with a check and circling the wrong answers. This gives the child the opportunity to learn through correcting his errors, rather than accepting a paper filled with failure.

(9) If you must make exceptions to classroom rules and procedures to accommodate your mentally retarded student, explain decisions that may cause jealousy or resentment.

(10) Be ready to answer frank inquiries from the retarded child's classmates. (p. 61)

Houghton (1978) has found that self-concept building with EEN children should be an integral part of their entire educational program. Many of these techniques are similar to those previously cited.

(1) Set goals to insure success.

(2) Reward often and early at first.

(3) Reinforce successful trials after failure.

(4) Avoid overpraise--be genuine.

(5) Try providing nonsocial reinforcement initially.

(6) Focus on working hard and trying.

(7) Consider using programmed materials at first.

(8) Encourage overlearning--this averts terminal errors and may prevent backsliding and discouragement.

(9) Make the subject matter relevant to the learner.

(10) Provide a nonthreatening environment.

(11) Encourage the learner to be active in the learning process.

(12) Make the environment conducive to honest and open interaction.

(13) Encourage intellectual and feeling levels of interaction.

(14) Promote feelings of acceptance.

(15) Encourage cooperative, positive relationships.

(16) Encourage self-evaluation.

(17) Create an atmosphere of trust.

(18) Be flexible.

(19) Plan activities with children.

(20) Accept limitations.

(21) Value the child for who he is. (p. 4)

Borba (1980) has stressed several means of enhancing the self-concept of EEN children who have been enrolled in

special education classrooms. These include positivism, successful experiences, modeling of significant others, sincere interest and concern, belief in comments, and quality of relationships. Concept Circles and Discovery Circles have been found to be effective methods of increasing a child's self-awareness, perception of one's feelings and the feelings of others, knowledge of oneself and others, and ability to evaluate oneself.

Burn (1977) has found puppetry to be an effective means of "aiding the exceptional child to internalize improved feelings of self-worth, self-esteem, self-motivation and self-acceptance" (p. 3). Involving both a sender and a receiver, puppetry allows for two-way communication and the flowing of one's total range of feelings in a socially acceptable way. Similarly, Sommers (1977) used a marionette project to enhance the self-concept of exceptional children as well as their self-awareness and knowledge of the bodily parts and their functions. The fifty LD children who completed the two month project could "safely express a much wider range of feelings through their marionettes than they could in dealing directly with real people" (p. 53).

Peer Relationships

Gable, Strain and Hendrickson (1979) have found that merely placing exceptional children in regular education

classrooms will not automatically remediate the social skill deficits these children may have. Bruininks (1978a) and Reese-Dukes and Stokes (1978) agree that special activities and experiences should be implemented which will specifically aid the exceptional child to build more positive relationships with his regular education peers.

Siegel, Siegel and Siegel (1978) have identified both the parents and teachers of an exceptional child as responsible for the development of the child's social perceptions. Parents and siblings may actually need to teach the child to play and respond to others with appropriate speech and language patterns. A peer companion could also be provided so the child could "practice" his newly acquired social skills. The child's teacher can reinforce the family's efforts by stressing communication skills and creating a classroom environment that allows for warm and accepting socialization.

Summary

This chapter has briefly reviewed only a small number of the strategies and methods of improving the exceptional child's self-concept and helping him build more positive peer relationships with regular education children. The teacher has a major responsibility to provide both guidance to the EEN child and an environment in which his regular education peers will accept him as a person. Numerous

strategies and activities which have been found to effectively enhance the exceptional child's self-concept and peer relationships were cited. The parents and siblings of the exceptional child were also named as playing an important role in the child's development of appropriate peer relationships.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Introduction

This chapter summarizes the present study by responding to the research questions previously stated and the author's opinion and recommendations in the areas of the exceptional child's self-concept and peer relationships with regular education children.

Summary of Studies

The research reported in this study has demonstrated contrary results in relation to the research question "How does the mentally retarded child and the learning disabled child evaluate himself in relation to children in regular education classrooms?" The results of two of the studies indicated that EEN children who remained in regular education classrooms had significantly higher self-concept scores than those EEN children who were segregated in special education classrooms. Two studies, however, found contrary results in which the EEN children who had been enrolled in special education classrooms had higher self-concept scores than the children who were in regular education

classrooms. One study did not find a significant difference between the self-concept scores of the regular education children and the EEN children who were mainstreamed in their regular classrooms for part of the day.

In response to the research question "Can the exceptional child's self-concept be effectively changed?" several studies indicated a positive change of the EEN child's self-concept. One study brought about such results through a procedure of cross-age helping with a group of EEN children. Two studies found similar results in which EEN children who were mainstreamed in regular education classrooms selectively utilized both of the reference groups they had contact with to bring about a positive change in their self-concepts.

When both of these studies were extended, however, and the experimental group of each study was presupposed to only use their regular education class as the reference group by which they would make their social comparisons, the self-concept scores of these children were found to be lower than the scores of the children who were free to use either reference group.

A significant change was not found between the pre- and post-test self-concept scores of the EEN children in either of two unrelated studies. One of the studies measured the effect of an eight-week developmental activity program while the other determined whether informal parent-teacher communication was related to changes in academic

achievement and self-concept among EEN children.

Conflicting results were found among studies related to the research question, "How well are mentally retarded children and learning disabled children accepted by their regular education peers?" Three unrelated studies, all of which utilized some type of structured interaction between EEN children and regular education children, resulted in improving the social status of the exceptional children. In one of the studies, an exceptional child worked along with regular education children on a specific project. Another used the games analysis approach to manipulate the components of games in order that an exceptional child could more effectively participate. The third used a procedure of "reverse mainstreaming" in which the regular education children went to the special education classroom to interact with the EEN children.

Four studies involving EEN children who were mainstreamed into regular education classrooms found that these children received lower peer acceptance ratings than the regular education children in the same classrooms. The results of two of these same studies indicated that the exceptional children had perceived their social status to be higher than they were actually rated by their regular education peers. One of these studies also found that the EEN children had lower self-concept scores than the regular education children.

In three unrelated studies, regular education children viewed videotapes of children with various labels and levels of competency. In one of the studies, the children rated the boy who was assigned neutral attributes lower than the boy who was given positive attributes, regardless of his label. Two other studies utilized videotapes of a normal-appearing child and a Downs Syndrome child, both with various levels of competency, involved in a spelling bee. In both of these studies, the regular education children rated the normal-appearing, competent target child more favorably than the abnormal-appearing, incompetent child.

In relation to the research question, "What are some possible methods or techniques of aiding the exceptional child improve his self-concept and build appropriate relationships with regular education children?" numerous strategies were given for use in the special education classroom to enhance the exceptional child's self-concept as well as many which would aid the EEN child in adjusting to the regular education classroom. Specific activities and experiences also need to be used to help the exceptional child learn appropriate social skills and build positive peer relationships with regular education children.

Opinion and Recommendations

As Cruickshank (1977) stated in relation to academic instruction, "the 'least' may more often be the most

restrictive place" (p. 193), this author feels that the regular education classroom may not be the appropriate setting in which the social and emotional needs of the exceptional child can be most effectively dealt with. Various programs geared toward academic remediation have been developed for exceptional education children. However, these have had little or no effect upon the child's social and emotional development. Auxiliary programs in these areas need to be developed and implemented to aid in the development of the exceptional child as an individual and fully-functioning person in society.

The research has indicated that part-time mainstreaming and structured interaction between EEN children and regular education children have had a positive effect upon the exceptional child's self-concept and peer relationships. Both the special education teacher and the regular education teacher should utilize these results, the techniques and methods suggested by other authors, and their own creativity, in developing activities and programs within their own classrooms to create an environment which will foster growth and understanding.

Summary

This chapter has briefly summarized all of the studies which were presented in this paper as well as expressed the author's opinion and recommendations in the areas of the self-concept and peer relationships of mentally retarded children and learning disabled children.

REFERENCES

REFERENCES

Ballard, M., Gottlieb, J., Corman, L., and Kaufman, M. Improving the social status of mainstreamed retarded children. Journal of Educational Psychology, 1977, 69, 605-611.

Borba, M. Self-esteem: A classroom affair, 101 ways to help children like themselves, as presented at Seventeenth Annual ACLD International Conference, Milwaukee, Wisconsin, February 1980.

Bruininks, V. L. Actual and perceived peer status of learning disabled students in mainstream programs. Journal of Special Education, 1978a, 12, 51-58.

Bruininks, V. L. Peer status and personality characteristics of learning disabled and nondisabled students. Journal of Learning Disabilities, 1978b, 11, 484-489.

Burn, J. R. Puppetry: Improving the self-concept of the exceptional child. Paper presented at the Annual International Convention, The Council for Exceptional Children, Atlanta, Georgia. April 11-15, 1977. (ERIC Document Reproduction Service No. ED 139 219).

Calhoun, G., Jr. Longitudinal investigation of classroom behavior and self-esteem of EMR, ED, LD and regular pupils. The Journal for Special Educators of the Mentally Retarded, 1978, 14, 91-96.

Calhoun, G., Jr. and Elliott, R. N. Jr. Self-concept and academic achievement of educable retarded and emotionally disturbed pupils. Exceptional Children, 1977, 43, 379-380.

Cronk, M. S. Attitude change toward trainable mentally retarded: "Mainstreaming in reverse." Paper presented at the Annual International Convention, The Council for Exceptional Children, Dallas, Texas, April 22-27, 1979. (ERIC Document Reproduction Service No. ED 171 007).

Cruickshank, W. M. Least restrictive placement: Administrative wishful thinking. Journal of Learning Disabilities, 1977, 10, 193-194.

Florio-Forslund, E. The application of a communication model to the problems of learning disabled children. 1977. (ERIC Document Reproduction Service No. ED 151 868).

Gabel, H., Graybill, D. and Connors, G. Parent-teacher communication in relation to child academic achievement and self-concept. Peabody Journal of Education 1977, 54, 142-145.

Gable, R. A., Strain, P. S., and Hendrickson, J. M. Strategies for improving the status and social behavior of learning disabled children. Learning Disability Quarterly, 1979, 2, 33-39.

Houghton, D. D. Affective education: Growth games for the mentally retarded. Paper presented at the Council for Exceptional Education. First World Congress on Future Special Education, Stirling, Scotland, June 25 - July 1, 1978. (ERIC Document Reproduction Service No. 158 516).

Kendall, W. S. Reading achievement and self-concept of educable retarded boys in three educational settings. Paper presented at the Fifty-fifth Annual International Convention, The Council for Exceptional Children, Atlanta, Georgia, 1977. (ERIC Document Reproduction Service No. 139 135).

Kirk, S. A. Educating exceptional children (2nd ed.). Boston: Houghton-Mifflin, 1972.

Marlowe, M. The games analysis intervention: A procedure to increase the peer acceptance and social adjustment of a retarded child. Education and Training of the Mentally Retarded, 1979, 14, 262-268.

Mauser, H. J. and Reynolds, R. P. Effects of a developmental physical activity program on children's body coordination and self-concept. Perceptual and Motor Skills, 1977, 44, 1057-1058.

Moller, B. Teaching the invisible retarded. Early Years, 1978, 8, 56, 58-61.

Reese-Dukes, J. L. and Stokes, E. H. Social acceptance of elementary educable mentally retarded pupils in the regular classroom. Education and Training of the Mentally Retarded, 1978, 13, 356-361.

Ribner, S. Effects of special class placement on the self-concept of exceptional children. Journal of Learning Disabilities, 1978, 11, 319-323.

Sheare, J. B. Impact of resource programs upon the self-concept and peer acceptance of learning disabled children. Psychology in the Schools, 1977, 15, 406-412.

Siegel, E., Siegel, R. and Siegel, P. Help for the lonely child: Strengthening social perception. New York: Sunrise Book, 1978.

Siperstein, G. and Gottlieb, J. Physical stigma and academic performance as factors effecting children's first impressions of handicapped peers. American Journal of Mental Deficiency, 1977, 81, 455-462.

Siperstein, G. N. Bak, J. J. and Gottlieb, J. Effects of group discussion on children's attitude toward handicapped peers. The Journal of Educational Research, 1977, 70, 131-134.

Smith, L. and Pfeiffer, I. Cross-age helping for the EMR child. Education and Training of the Mentally Retarded, 1977, 12, 32-35.

Smith, M. D., Dokecki, P. R. and Davis, E. E. School-related factors influencing the self-concept of children with learning problems. Peabody Journal of Education, 1977, 54, 185-195.

Sommers, S. Marionette making and self-awareness. American Journal of Art Therapy, 1977, 16, 51-53.

Strang, L., Smith, M. D. and Rogers, C. M. Social comparison, multiple reference groups, and self-concepts of academically handicapped children before and after mainstreaming. Journal of Educational Psychology, 1978, 70, 487-497.

Young, S., Algozzine, B. and Schmid, R. The effects of assigned attributes and labels on children's peer acceptance ratings. Education and Training of the Mentally Retarded, 1979, 14, 257-261.